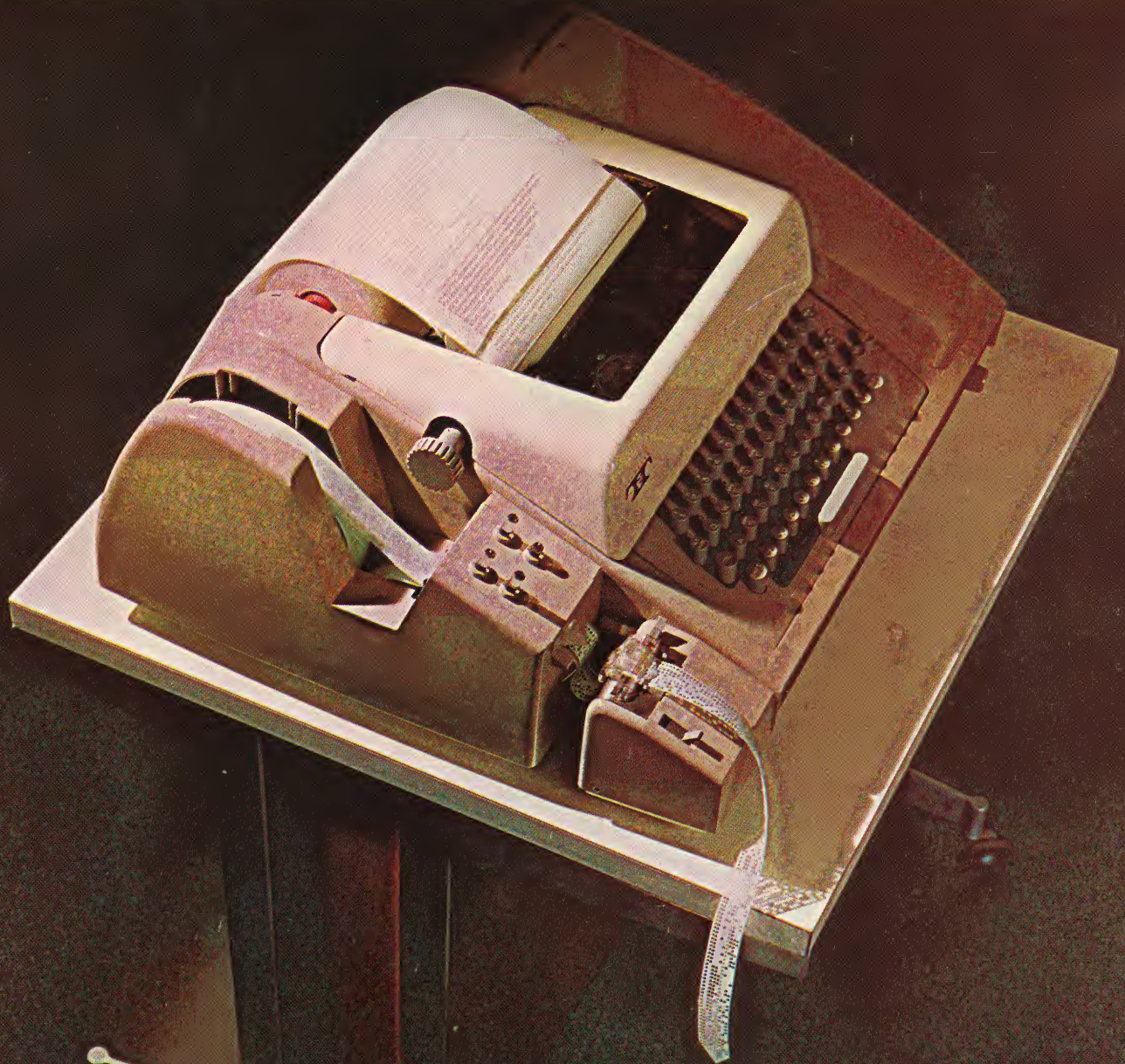


MATHATRON

TIO

The world's first and only
electronic calculator | computer
with alpha | numeric
input | output

The MATHATRON TIO is the only electronic calculator/computer with: ● automatic parenthecation ● automatic decimal point location without operator intervention ● page printout on 8½ wide copy paper ● 8 level punched paper tape input/output and off-line storage ● 4 or 8 individually addressable storage registers ● plus 5 separate registers for arithmetic manipulations ● and the ability to handle complex computations without special programming or manual re-entry of data ● plus many other time and cost saving convenience features. Why not find out how the MATHATRON TIO can help you cut your calculating costs





the world's first and only electronic calculator/computer with alpha/numeric input/output

Developed and produced by Mathatronics, Inc., makers of the world's first electronic calculator/computer; the Mathatron TIO combines the convenience of a desk calculator with the computational capabilities of large scale electronic computers in a single low-cost unit.

The MATHATRON TIO is sold and serviced by:

SPECIFICATIONS AND FEATURES

Input

Direct Entry Keyboard: for fast, direct entry of data, problems, and programs.

Eliminates programming problems and delays.

Furnishes complete operator control of all functions and operations.

Data and formulas are entered using ordinary algebraic notation including parentheses.

Punched Paper Tape input capability provides inexpensive off-line storage of programs and data and fast, low-cost inter-machine communication.

Output

Page Printout on 8½ inch wide copy paper to any length desired offers complete flexibility in program planning. Printout can be easily stored or transmitted with other documentation.

All data entered and computed results are automatically printed to give the operator quick, easy reference to prior operations.

Alphabetic headings and designations, plus formatting, provide for organization and identification of output data.

Punched Paper Tape produced by the Mathatron TIO paper tape punch may be used for re-entry of data for further processing.

Punched paper tape data may be transmitted over standard Teletype lines.

Internal Operations

Floating point arithmetic, built in parenthecation, and automatic decimal point location provide maximum speed and efficiency.

Number Range

100 column capacity from $\pm 10^{-42}$ to 10^{+58} virtually eliminates overflow problems.

Storage Registers

4 or 8 individually addressable storage registers eliminate need for manual re-entry of formulas, numbers, or intermediate results. Each storage register can store a sign (+ or -) + 9 significant digits and a 2 digit power of 10 exponent in the range from 10^{-42} to 10^{+58} .

Program Memory

24 or 48 steps of program memory make it possible for the Mathatron TIO to handle long, complex calculations without any intermediate entry of data or instructions. Mathematical operators: (,), +, ×, -, ÷, each require 1 step of program memory: specifying a storage register requires 2 steps.

Accuracy

8 to 9 significant digit accuracy in all solutions. Addition: 9 significant digits (not rounded). Multiplication and Division: 9 significant digits (manipulated) or 8 significant digits (rounded).

Speed

100 accumulations per second, results are printed out at the rate of 10 characters per second, data on punched paper tape is read in at 10 characters per second and punched out at 10 characters per second.

Circuitry

All solid state logic and circuitry, ferrite core program memory and storage registers guarantee maximum reliability and dependable performance.

Dimensions

Maximum height: 34¼ inches

Maximum depth: 24 inches

Maximum width: 25½ inches

Installation

No special installation, wiring, or environmental controls needed . . . just plug it in and you're ready to go.

Power Requirements

105-125 volts, 50 or 60 cycle, 190-240 watts.

Special Features

Unique parenthecation keys for left and right parentheses (brackets) facilitate the entry of complex algebraic formulas.

Special control keys provide direct operator control of all input, output, and processing operations.

Automatic carriage return: when the = key is touched at the end of a formula, the page printer carriage automatically returns to the left hand side of the page, spaces up one line after printing out the result of the computation being performed.

Automatic decimal point location: decimal points are entered as they appear in an equation and results are automatically printed out with the decimal point in its correct arithmetic location.

Automatic learn: formulas or programs which are to be used frequently can be typed in once, using the Learn Mode key. The sequence of operations will then repeat automatically stopping for manual or automatic entry of variable data from the keyboard or paper tape reader.

Uses ordinary mathematical notation: data and formulas are entered without special coding or re-arrangement. Programming delays and costs are eliminated.